#### **IPCAM CGI SDK 1.7**

#### **Contents**

IPCAM CGI SDK 1.7	1
summary	3
snapshot.cgi	4
videostream.cgi	4
videostream.asf	4
get_status.cgi	5
get_camera_params.cgi	6
decoder_control.cgi	6
camera_control.cgi	7
reboot.cgi	8
restore_factory.cgi	8
get_params.cgi	8
upgrade_firmware.cgi	11
upgrade_htmls.cgi	11
set_alias.cgi	11
set_datetime.cgi	12
set_users.cgi	12
set_devices.cgi	12
set_network.cgi	13
set_wifi.cgi	13
set_pppoe.cgi	14
set_upnp.cgi	14
set_ddns.cgi	15
set_ftp.cgi	15
set_mail.cgi	16
set_alarm.cgi	16
Comm_write.cgi	16
Set_forbidden.cgi	17
get_forbidden.cgi	18
Set_misc.cgi	18
get_misc.cgi	19
set_decoder.cgi	19

#### summary

The CGI APIs is based on http protocal.

Different CGI with different Permissions: visitor, operator and Administrator. In this article cgi only support get and post method. upgrade\_firmware.cgi and upgrade\_htmls.cgi only support post method, otherscgi only support get method.

next\_url:an option param. If you don't want only return a simple "OK" when set succeed, you can add a param in the end—next\_url. The param is the next file it jump to when set succeed. The param must be a Relative path.

```
Get: (Example)
<form action="/set mail.cgi">
<input name="svr">
<input name="user">
<input name="pwd">
<input name="sender">
<input name="receiver1">
<input name="receiver2">
<input name="receiver3">
<input name="receiver4">
<input type=hidden name="next_url" value="index.htm">
<input type=submit value="ok">
</form>
Post: (Example)
<form action="upgrade_firmware.cgi?next_url=index.htm" method="post"</pre>
enctype="multipart/form-data">
<input type="file" name="file" size="20">
</form>
```

# snapshot.cgi

description	To obtain the snapshot
Permission	visitor
Syntax	/snapshot.cgi[?user=&pwd=&next_url=]
Parameters	user:username
	pwd:password
	next_url:the name of snapshot
Note	1 If not use the parameter "next_url", the snapshot name is: device
	id(Alias)_ Current time.jpg
	2 Use "next_url" (for example:next_url=1 the name of photo:1.jpg)
	3 support 2 Authentication Metheds: http Basic64 encode and use
	username/password in the param directly.

# videostream.cgi

description	Use server push mode to send videostream to Client APP	
Permission	visitor	
Syntax	/videostream.cgi[?user=&pwd=&resolution=]	
Parameters	user:username	
	pwd:password	
Note	Resolution: 8: 320*240	
	32: 640*480	

#### videostream.asf

description	Ipcam send videostream of asf format, only support vlc player and	
	mplayer	
Permission	visitor	
Syntax	/videostream.asf[?user=&pwd=&resolution=]	
Parameters	user:username	
	pwd:password	
Note	Resolution: 8: 320*240	
	32: 640*480	

# get\_status.cgi

description	To obtain the Device status info.
Permission	everyone
Syntax	/get_status.cgi
return	now: The count of seconds form 1970-1-1 0:0:0 to now
	alarm_status: 0:no alarm
	1:motion alarm
	2:input alarm
	ddns_status: DDNS status(details see below)
	upnp_status: UPNP status(details see below)
Note	support 2 Authentication Metheds: http Basic64 encode and use
	username/password in the param directly.

### ddns\_status

Return	description
0	No Action
1	It's connecting
2	Can't connect to the Server
3	Dyndns Succeed
4	DynDns Failed: Dyndns.org Server Error
5	DynDns Failed: Incorrect User or Password
6	DynDns Failed: Need Credited User
7	DynDns Failed: Illegal Host Format
8	DynDns Failed: The Host Does not Exist
9	DynDns Failed: The Host Does not Belong to You
10	DynDns Failed: Too Many or Too Few Hosts
11	DynDns Failed: The Host is Blocked for Abusing
12	DynDns Failed: Bad Reply from Server
13	DynDns Failed: Bad Reply from Server
14	Oray Failed: Bad Reply from Server
15	Oray Failed: Incorrect User or Password
16	Oray Failed: Incorrect Hostname
17	Oray Succeed
18	Reserved
19	Reserved
20	Reserved
21	Reserved

#### upnp\_status

Return	description
0	No Action
1	Succeed
2	Device System Error
3	Errors in Network Communication
4	Errors in Chat with UPnP Device
5	Rejected by UPnP Device, Maybe Port Conflict

#### get\_camera\_params.cgi

description	obtain camera params	
Permission	visitor	
Syntax	/get_camera_params.cgi[?user=&pwd=]	
Parameters	user:username	
	pwd:password	
Note	Return:	
	Resolution: 8: 320*240	
	32: 640*480	
	Brightness: 0-255	
	Contrast: 0-6	
	Mode: 0: 50hz	
	1: 60hz	
	2 outdoor format	
	Flip: 0: initial	
	1: vertical rotate	
	2: horizontal rotate	
	3: vertical + horizontal rotate	

#### decoder\_control.cgi

description	Decoder control	
Permission	operator	
Syntax	/decoder_control.cgi?command=[&next_url=]	
Parameters	value	description

0	up
1	Stop up
2	down
3	Stop down
4	left
5	Stop left
6	right
7	Stop right
	Reserved
25	center
26	Vertical patrol
27	Stop vertical patrol
28	Horizon patrol
29	Stop horizon patrol
	Reserved
94	IO output high
95	IO output low

# camera\_control.cgi

description	To control camera sensor Parameters
Permission	operator
Syntax	/camera_control.cgi?param=&value=[&next_url=]
Parameters	param
	value (see below)

param	value
0 Resolution	8: 320*240
	32:640*480
1 Brightness	0~255
2 Contrast	0~6
3 mode	0: 50Hz
	1: 60Hz
	2: Outdoor
5 Flip&mirror	0: default
	1: flip
	2: mirror
	3: flip + mirror

#### reboot.cgi

description	Reboot device
Permission	Administrator
Syntax	/reboot.cgi[?next_url=]

#### restore\_factory.cgi

description	Restore factory settings
Permission	Administrator
Syntax	/restore_factory.cgi[?next_url=]

#### get\_params.cgi

description	To obtain the device settings info.
Permission	Administrator
Syntax	/get_params.cgi

#### Return:

id	Device ID
sys_ver	Firmware version number
app_ver	Web UI version number
alias	alias
now	The count of seconds form 1970-1-1 0:0:0 to
	now
tz	The current time zone settings contrast with
	the standard time zone GMT (Unit: Seconds)
ntp_enable	0:disable ntp Calibration time
	1:enable
ntp_svr	Ntp Server
user1_name	User1 name
user1_pwd	User1 password

user1_pri	User1 permission
user8_name	User8 name
user8_pwd	User8 password
user8_pri	User8 permission
dev2_alias	The 2nd Device alias
dev2_host	The 2nd Device host(IP or Domain name)
dev2_port	The 2nd Device port
dev2_user	The 2nd Device user name
dev2_pwd	The 2nd Device password
dev9_alias	The 9th Device alias
dev9_host	The 9th Device host(IP or Domain name)
dev9_port	The 9th Device port
dev9_user	The 9th Device user name
dev9_pwd	The 9th Device password
ip	IP address
mask	mask
gateway	gateway
dns	Dns server
port	port
wifi_enable	0:disable
_	1:enable
wifi_ssid	WIFI SSID
wifi_encrypt	0:disable
	1:web
	2:wpa tkip
	3:wpa aes
	4:wpa2 aes
	5:wpa2 tkip+aes
wifi_defkey	Wep Default TX Key
wifi_key1	Key1
wifi_key2	Key2
wifi_key3	Key3
wifi_key4	Key4
wifi_authtype	Authetication type 0:open
	1:share
wifi_keyformat	Keyformat 0:Hex
,	1:ASCII
wifi_key1_bits	0:64 bits
-	1:128 bits
wifi_key2_bits	0:64 bits
, –	1:128 bits

wifi_key3_bits	0:64 bits
wiii_key5_bits	1:128 bits
wifi_key4_bits	0:64 bits
wiii_key+_bit3	1:128 bits
wifi_channel	Channel (default 5)
wifi_mode	Mode (default 0)
	,
wifi_wpa_psk	wpa_psk 0:disable
pppoe_enable	1:enable
nnnoo ugar	
pppoe_user	pppoe user
pppoe_pwd	pppoe password
upnp_enable	0:disable
	1:enable
ddns_service	0:disable DDNS
	1:oray.cn
	2:Dyndns.org(dyndns)
	3:Dyndns.org(statdns)
	4:Dyndns.org(custom)
	5: Reserved
	6: Reserved
	7: Reserved
	8:3322.org(dyndns)
	9:3322.org(statdns)
ddns_user	Ddns user
ddns_pwd	Ddns password
ddns_host	Ddns host
ddns_proxy_svr	Proxy server (only used in china )
ddns_proxy_port	Proxy port
mail_svr	Mailbox server
mail_port	Mailbox server port
mail_user	Mail user name
mail_pwd	Mail password
mail_sender	The sender mailbox
mail_receiver1	The receiver1 mailbox
mail_receiver2	The receiver2 mailbox
mail_receiver3	The receiver3 mailbox
mail_receiver4	The receiver4 mailbox
mail_inet_ip	Mail send internet IP 0:disable
-	1:enable
ftp_svr	FTP server
ftp_port	FTP server port
ftp_user	User name
ftp_pwd	password
. – .	ı '

ftp_dir	catalogue
ftp_mode	0:post
	1:pasv
ftp_upload_interval	Upload interval (Seconds) 0:disable
alarm_motion_armed	0:motion disable
	1:enable
alarm_motion_sensitivity	Sensitivity 0:high 1:medium
	2:low
	3:ultra low
alarm_input_armed	0:input detect disable
	1:enable
alarm_iolinkage	0:when alarm disable IO linkage
	1:enable
alarm_mail	0:when alarm disable mail send
	1:enable
alarm_upload_interval	Upload interval (Seconds) 0:disable

## upgrade\_firmware.cgi

description	Upgrade firmware
Permission	Administrator
Syntax	/upgrade_firmware.cgi[?next_url=]
Note	Must use POST method.

### upgrade\_htmls.cgi

description	Upgrade Web UI firmware
Permission	Administrator
Syntax	/upgrade_htmls.cgi[?next_url=]
Note	Must use POST method.

#### set\_alias.cgi

description	Set device alias
Permission	Administrator
Syntax	/set_alias.cgi?alias=[&next_url=]
Parameters	Alias:length <=20

### set\_datetime.cgi

description	Set device data time
Permission	Administrator
Syntax	/set_datetime.cgi?tz=&ntp_enable=&ntp_svr=[&now=&next_url=]
Parameters	now: The count of seconds form 1970-1-1 0:0:0 to now;if use, the
	device will calibration time depend on it.
	tz:set time zone. The current time zone settings contrast with the
	standard time zone GMT (Unit: Seconds)
	ntp_enable:0:disable 1:enable
	ntp_svr:ntp server length <= 64

#### set\_users.cgi

description	Set device user settings	
Permission	Administrator	
Syntax	/set_users.cgi?user1=&pwd1=&pri1=&user2=&pwd2=&pri2=&user3=&pwd	
	3=&pri3=&user4=&pwd4=&pri4=&user5=&pwd5=&pri5=&user6=&pwd6=&	
	pri6=&user7=&pwd7=&pri7=&user8=&pwd8=&pri8=[&next_url=]	
Parameters	user1: user1 name length <= 12	
	pwd1: user1 password length <= 12	
	pri1: user1 Permission 0:visitor 1:operator 2: administrator	
	user8: user1 name length <= 12	
	pwd8: user1 password length <= 12	
	pri8: user1 Permission 0:visitor	
	1:operator	
	2: administrator	

# set\_devices.cgi

description	Set muilt device	
Permission	Administrator	
Syntax	/set_devices.cgi?dev2_alias=&dev2_host=&dev2_port=&dev2_user=&dev	
	2_pwd=&dev3_alias=&dev3_host=&dev3_port=&dev3_user=&dev3_pwd=	

	&dev4_alias=&dev4_host=&dev4_port=&dev4_user=&dev4_pwd=&dev5_	
	alias=&dev5_host=&dev5_port=&dev5_user=&dev5_pwd=&dev6_alias=&	
	dev6_host=&dev6_port=&dev6_user=&dev6_pwd=&dev7_alias=&dev7_h	
	ost=&dev7_port=&dev7_user=&dev7_pwd=&dev8_alias=&dev8_host=&de	
	v8_port=&dev8_user=&dev8_pwd=&dev9_alias=&dev9_host=&dev9_port	
	=&dev9_user=&dev9_pwd=[&next_url=]	
Parameters	dev2_alias:The 2nd Device alias	
	dev2_host:The 2nd Device host(IP or Domain name)	
	dev2_port:The 2nd Device port	
	dev2_user:The 2nd Device user name	
	dev2_pwd:The 2nd Device password	
	···	
	dev9_alias:The 9th Device alias	
	dev9_host:The 9th Device host(IP or Domain name)	
	dev9_port:The 9th Device port	
	dev9_user:The 9th Device user name	
	dev9_pwd:The 9th Device password	

### set\_network.cgi

description	Set device basic net settings	
Permission	Administrator	
Syntax	/set_network.cgi?ip=&mask=&gateway=&dns=&port=[&next_url=]	
Parameters	Ip:ip address; if ip set null,The device will DHCP Ip	
	mask: mask	
	gateway: gateway	
	dns: dns server	
	port: port number	

# set\_wifi.cgi

description	Set device wireless settings (wifi)	
Permission	Administrator	
Syntax	/set_wifi.cgi?enable=&ssid=&encrypt=&defkey=&key1=&key2=&key3=&	
	key4=&authtype=&keyformat=&key1_bits=&key2_bits=&key3_bits=&key	
	4_bits=&channel=&mode=&wpa_psk=[&next_url=]	
Parameters	enable: 0:disable	
	1:enable	
	ssid: wifi SSID	

encrypt: 0:disable encrypt 1:web 2:wpa tkip 3:wpa aes 4:wpa2 aes 5:wpa2 tkip+aes defkey: 0~3(web encrypt) key1:wep key1 key4:wep key4 authtype: Authetication type 0:open 1:share keyformat: Keyformat 0:Hex 1:ASCII key1\_bits: 0:64 bits 1:128 bits key4\_bits: 0:64 bits 1:128 bits channel: Channel (default 5) mode: Mode (default 0) wpa\_psk: wpa\_psk length <= 64;if not use,set null.

#### set\_pppoe.cgi

description	Set device pppoe settings	
Permission	Administrator	
Syntax	/set_pppoe.cgi?enable=&user=&pwd= [&next_url=]	
Parameters	enable: 0:disable pppoe	
	1:enable	
	user: user name length <=40	
	pwd: password length <=20	

#### set\_upnp.cgi

description	Set UPNP settings
Permission	Administrator
Syntax	/set_upnp.cgi?enable=[&next_url=]
Parameters	enable: 0:disable UPNP

1:enable

## set\_ddns.cgi

description	Set device DDNS settings	
Permission	Administrator	
Syntax	/set_ddns.cgi?service=&user=&pwd=&host=&proxy_svr=&proxy_port=	
	[&next_url=]	
Parameters	service :	
	0:disable DDNS;	
	1:oray.cn;	
	2: DynDns.org(dyndns);	
	3: DynDns.org(statdns);	
	4: DynDns.org(custom)	
	5: Reserved	
	6: Reserved	
	7: Reserved	
	8:3322.org(dyndns)	
	9:3322.org(statdns)	
	user: user name length <=20	
	pwd: password length <=20	
	host:DDNS domain name length <=40	
	proxy_svr: Proxy server length <=20 (only used in china Mainland or	
	HongKong )	
	proxy_port : Proxy port	

## set\_ftp.cgi

description	Set device FTP settings	
Permission	Administrator	
Syntax	/set_ftp.cgi?svr=&port=&user=&pwd=&mode=&dir=&upload_interval=[	
	&next_url=]	
Parameters	svr: FTP server length <=64	
	port: FTP server port	
	user: User name	
	pwd: password	
	dir: FTP upload catalogue	
	mode: 0:post	
	1:pasv	

#### set\_mail.cgi

description	Set device mail settings	
Permission	Administrator	
Syntax	/set_mail.cgi?svr=&port=&user=&pwd=&sender=&receiver1=&receiver	
	2=&receiver3=&receiver4=&mail_inet_ip=[&next_url=]	
Parameters	svr: mail server length <=64	
	port: Mailbox server port	
	user: User name length <=20	
	pwd: password length <=20	
	sender: The sender mailbox length <=40	
	receiver1: The receiver1 mailbox length <=40	
	receiver2: The receiver2 mailbox length <=40	
	receiver3: The receiver3 mailbox length <=40	
	receiver4: The receiver4 mailbox length <=40	
	mail_inet_ip: 0:disable	
	1:enable	

#### set\_alarm.cgi

description	Set device alarm settings	
Permission	Administrator	
Syntax	/set_alarm.cgi?motion_armed=&motion_sensitivity=&input_armed=&io	
	linkage=&mail=&upload_interval=[&next_url=]	
Parameters	motion_armed: 0:motion disable 1:enable	
	motion_sensitivity: Sensitivity 0:high 1:medium 2:low 3:ultra low	
	input_armed: 0:input detect disable 1:enable	
	iolinkage: 0:when alarm disable IO linkage 1:enable	
	mail: 0:when alarm disable mail send 1:enable	
	upload_interval: Upload interval (Seconds) 0:disable (range:0-65535)	

# Comm\_write.cgi

description	Sending data through camera serial port.	Only support few model
Permission	Operator	

Syntax	/comm_write.cgi?port=&baud=&bytes=&data=[&next_url=]
Parameters	Port: 0-3
	Baud:
	9: B1200
	11: B2400
	12: B4800
	13: B9600
	14: B19200
	15: B38400
	4097: B57600
	4098: B115200
	Bytes: < 256
	Data: use url code

# Set\_forbidden.cgi

description	Setting the forbidden for checking v	video/audio
Permission	administrator	
Syntax	/set_forbidden.cgi?schedule_enable=&schedule_sun_0=&schedule_s	
	un_1=&schedule_sun_2=&schedule	e_mon_o=&schedule_mon_1=&sch
	edule_mon_2=&schedule_tue_0=&	schedule_tue_1=&schedule_tue_2
	=&schedule_wed_0=&schedule_we	ed_1=&schedule_web_2=&schedul
	e_thu_0=&schedule_thu_1=&sched	dule_thu_2=&schedule_fri_0=&sch
	edule_fri_1=&schedule_fri_2=&sch	edule_sat_0=&schedule_sat_1=&s
	chedule_sat_2=[&next_url=]	
Parameters	Schedule_enable	Plan to forbidding for audio/video
	Schedule_sun_0	Sunday plan. 24hours/day.
	Schedule_sun_1	Divided 24hours to 96 time
	Schedule_sun_2	district, each district for 15
		munites.
		Bit0-95: 0: not forbid, 1: forbid
	Schedule_mon_0	]
	Schedule_mon_1	]
	Schedule_mon_2	
	Schedule_tue_0	
	Schedule_tue_1	
	Schedule_tue_2	
	Schedule_wed_0	
	Schedule_wed_1	
	Schedule_wed_2	
	Schedule_thu_0	
	Schedule_thu_1	

	Schedule_thu_2	
	Schedule_fri_0	
	Schedule_fri_1	
	Schedule_fri_2	
	Schedule_sat_0	
	Schedule_sat_1	
	Schedule_sat_2	

# get\_forbidden.cgi

description	Access the forbidding for checking audio/video
Permission	Administrator
Syntax	/get_forbidden.cgi
return	See set_forbidden.cgi

# Set\_misc.cgi

description	Set rotational Parameters of camera
Permission	Administrator
Syntax	/set_misc.cgi?
	[led_mode=&ptz_center_onstart=&ptz_auto_patrol_interval=&ptz_auto_pa
	trol_type=&ptz_patrol_h_rounds=&ptz_patrol_v_rounds=&next_url=]
Parameters	Led_mode: 0:mode1
	1:model2
	2:shut off the led
	Ptz_center_onstart: =1
	Ptz_auto_patrol_interval, =0: no auto rotating
	Ptz_auto_patrol_type: 0:no rotate
	1:horizontal
	2: vertical
	3: horizontal + vertical

Ptz_patrol_h_round:	0: Infi	inite
Ptz_patrol_v_round:	0: Infi	inite
Ptz_patrol_rate:	0-100,	0: the fastest
Ptz_patrol_up_rate:	0-100,	0: the slowest
Ptz_patrol down_rate	0-100,	0: the slowest
Ptz_patrol left_rate:	0-100,	0: the slowest
Ptz_patrol right_rate:	0-100,	0: the slowest

# get\_misc.cgi

description	Obtain rotational Parameters of camera
Permission	Administrator
Syntax	/get_misc.cgi?
Parameters	See get_misc.cgi

### set\_decoder.cgi

description	Set the parameter for decoder
Permission	Administrator
Syntax	/set_decoder.cgi?baud=[&next_url=]
Parameters	Baud:
	9:B1200
	11: B2400
	12: B4800
	13: B9600
	14: B19200
	15: B38400
	4097: B57600
	4098: B115200